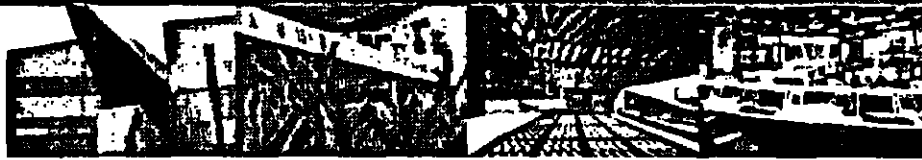



AGENDA



Thursday, June 8, 2006

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Public Works
RECOMMENDATION FOR COUNCIL
ACTION

ITEM 32

29

Subject: Authorize negotiation and execution of an amendment to the professional services agreement with CAMP DRESSER & McKEE (CDM) Austin, TX, for supplemental engineering services for the Ulrich Water Treatment Plant Expansion Projects in the amount of \$ 2,370,529 for a total contract amount not to exceed \$ 23,149,704 . The \$2,370,529 cost includes ratification of \$515,000 for work that has already been completed.

Amount and Source of Funding: Funding in the amount of \$ 2,370,529 is available in the Fiscal Year 2005-2006 Approved Capital Budget of the Austin Water Utility

Fiscal Note: A fiscal note is attached.

For More Information:

Jay Ulary, P.E. 974-7113; Jim Randig, P.E. 972-0259;
 Laura Bohl 974-7064.

Prior Council Action:

06/22/00 - Initial PSA for Preliminary Engineering Report and design/construction phase services for a Membrane Demonstration Plant; 03/22/01 - Construction Phase services for the Membrane Demonstration Plant; 07/18/02 - Design Phase Services; 10/23/03 Construction Phase Services.

Boards and Commission Action:

MBE/WBE: 19.30% MBE and 32.82% WBE subconsultant participation to date.

Additional Backup Material

(click to open)

- ☐ [CDM Fiscal Note](#)
- ☐ [Ratification Memo](#)
- ☐ [M/WBE Sub Goals](#)

The work to be performed under this proposed amendment is for the Chlorine Feed System Investigative report and additional construction phase services required due to the extended contract time required by Archer Western Contractors to complete the work. The City will pursue reimbursement for this work from Archer Western Contractors, Inc.

The City of Austin utilizes surface water resources from impoundments of the Colorado River. The City operates three water treatment plants, all of which employ lime softening, with disinfection using free chlorine followed by chloramines. One of these plants is the Ulrich Water Treatment Plant (WTP). Improvements made and new facilities at the Ulrich WTP include improvements to the raw water pump station, modifications to the existing primary basins, modifications to and new chemical feed systems, modifications to the

filters and associated piping, improvements to the medium/high service pump station, a new main plant electrical substation, and modifications to and new sludge handling facilities.

In November 2003, the City entered into a construction contract with Archer Western Contractors, Inc. for construction of the Ullrich WTP Expansion to 160 MGD (million gallons per day) – Contract 3 Project in the amount of \$60,852,810. The construction contract included installation of equipment prepurchased by the City from seven vendors. The dollar value of the prepurchased equipment was \$9,625,020.

The contract required the Archer Western Contractors to substantially complete the project by February 8, 2006, and to finally complete the project by May 9, 2006. In July 2005, a problem was discovered with the newly installed chlorine feed system that was constructed by Archer Western Contractors. There was need to determine what caused the problem and CDM performed analysis to determine the cause and to provide recommendations to correct the problem to the City. Based upon the result of investigations into the problem it was recommended to the City that Archer Western Contractors be directed to repair the bulk chlorine storage tanks and to remove and replace the chlorine piping in the chlorine feed system. The City followed those recommendations. Archer Western Contractors has indicated that they disagreed with the results of the investigations but they began to perform the work as directed.

Archer Western Contractors failed to meet the substantial and final completion dates required by the original schedule. Subsequently, the City has demanded that Archer Western Contractors substantially complete the Project by September 15, 2006, and to finally complete the Project by December 15, 2006. Archer Western Contractors contend that the project is behind schedule due to either delays in receipt of owner supplied equipment or delays due to the City and/or their design consultant.

CIP FISCAL NOTE

DATE OF COUNCIL CONSIDERATION:
WHERE ON AGENDA:
DEPARTMENT:

06/08/06
Resolution
Austin Water Utility

DESCRIPTION:

Authorize negotiation and execution of a ratification to an amendment to the professional services agreement with CAMP DRESSER & McKEE (CDM) Austin, TX, for supplemental engineering services for the Ulrich Water Treatment Plant Expansion Projects in the amount of \$3,319,995 for a total contract amount not to exceed \$24,099,172.

FINANCIAL INFORMATION:

Parent Project Name:	Water System Expansion & Imps.
Project Authorization:	2005-06 Approved Capital Budget
Funding Source:	Capital Recovery Fees
Number:	4240 227 1018

Current Appropriation	\$ 40,428,000.00
Unencumbered Balance	12,550,753.06 *
Amount of This Action	<u>(3,319,995.00)</u>
Remaining Balance	<u>\$ 9,230,758.06</u>
Current Available Balance	\$ 12,424,208.06
Less Outstanding Commitments	<u>126,545.00</u>
Estimated Unencumbered Balance	<u>\$ 12,550,753.06 *</u>

Utility Finance:



David Anders, Utilities Finance Manager

Date: 5/24/06

REF. # 4240 227 7160



MEMORANDUM

TO: Mayor and Council

FROM: Joe Canales, Deputy City Manager

DATE: June 2, 2006

SUBJECT: Authorization for Professional Services Agreements Associated with the Ullrich Water Treatment Plant Expansion – 06/08/06 Council Agenda

I am providing you with further information concerning three RCAs on the June 8 agenda that are associated with the Ullrich Water Treatment Plant (WTP) Expansion. The RCAs are as follows:

- A contract with Freese and Nichols, Inc. for construction management and engineering services in the amount up to \$400,000, which includes a ratification of \$200,000 for work that has already been performed.
- A contract with Navigant Consulting, Inc. for forensic scheduling services in the amount up to \$120,000, which includes a ratification of \$50,000 for work that has already been performed.
- A supplemental Amendment to the Professional Services agreement with Camp Dresser & McKee, Inc. (CDM) for supplemental engineering services, in the amount of \$2,370,529 for a total contract amount not to exceed \$23,149,704. The amendment includes ratification of \$515,000 for work that has already been performed.

If you will recall, City staff briefed Council on January 26, 2006, in Executive Session to discuss the status of the Ullrich Water Treatment Plant and the "Calcon Report". At that meeting, staff indicated the urgency of taking appropriate action to increase the plant capacity to address summer water demands. After the Executive Session, Council approved hiring outside counsel and engineering consultants to assist in project evaluation, project resolution, and potential litigation. Since that time, with the assistance of outside consultants, including CDM, City staff has diligently pursued meeting those goals. At this time, City staff has been able to establish the range of additional project expenses with reasonable certainty and is returning to Council for ratification and approval of those anticipated expenses. A more detailed explanation follows.

In November 2003, the City entered into a construction contract with Archer Western Contractors, Inc. for construction of the Ullrich WTP Expansion to 160 MGD – Contract 3 Project in the amount of \$60,852,810. The construction contract included installation of equipment prepurchased by the City from seven vendors. The dollar value of the prepurchased equipment was \$9,625,020. The contract required the contractor to increase capacity of the existing Ullrich WTP from 100 MGD to 160 MGD by May 31, 2005. In addition, the contract required the Archer Western Contractors to substantially complete the project by February 8,

2006, and to finally complete the project by May 9, 2006. Archer Western has failed increase the plant treatment capacity and to meet the substantial and final completion contractual milestones.

In July 2005, problems were discovered with the new Chlorine Feed System constructed by Archer Western as part of the expansion project. There was need to determine what caused the problem and to provide recommendations to correct the problem to the City. Based upon the results the City directed Archer Western Contractors to repair the bulk chlorine storage tanks and to remove and replace the chlorine piping in the chlorine feed system. Archer Western Contractors has indicated that they disagreed with the results of the investigations.

Pertaining to the Freese and Nichols contract:

In order to provide an independent evaluation of the contractor's schedules to complete the rework for the Chlorine Feed System substantial and final completion, outside legal council and Upper Management determined an immediate need to hire an independent construction management firm with extensive experience with chlorine feed systems. In addition, the firm selected is an independent facilitator to resolve construction issues in a timely manner.

Pertaining to the Navigant Contract:

Archer Westerns Contractors contract required them to provide a minimum of 30 days notice to the prepurchase equipment supplier as to the date when they desired the equipment to arrive on site. The prepurchased equipment suppliers were required by their contracts, with the same advance minimum 30 day notice, to ship the equipment to the job site. Failure of these suppliers may has resulted in delay claims against the City by Archer Western. Due to the complexity of evaluating the delay issues, outside legal counsel recommended that the City immediately retain an expert forensic scheduling analysis firm to assist in resolving the issues.

Pertaining to the Amendment to the CDM Professional Services Agreement:

Once the problems with the Chlorine Feed system were discovered, there was an immediate need to determine if the problem was systemic with the system or was the issue a matter that could quickly be resolved. Since CDM was the design engineer of record, the City requested that CDM perform an engineering analysis, including any chemical analysis necessary, on the problems with the Chlorine Feed System and made the recommendations to the City. In addition, CDM assisted the City in the handling a neighborhood meeting specifically set up to provide neighbors information on the Chlorine Feed System safety issues. CDM also performed engineering services that were outside of their original scope of work that had to be completed in an expeditious manner so as not to delay Archer Western Contractors. The majority of the work to be performed under this proposed amendment is for the Chlorine Feed System investigative report and additional construction phase services required due to the extended contract time required by Archer Western Contractors to complete the work. The City will pursue reimbursement for this work from Archer Western Contractors, Inc.

Please contact me at 974-2194 if you have any questions concerning this matter or if you would like a more in-depth briefing.



Joe Canales
Deputy City Manager

cc: Toby Hammett Futrell, City Manager
Chris Lippe, P.E., Austin Water Utility Department

AUTHORIZATION HISTORY

Amount	DATE	DESCRIPTION
\$2,100,000.00	06/22/00	Council authorization to negotiate and execute Professional Services Agreement for Preliminary Engineering and limited Design Phase Services
\$ 7,480.00	Admin	Additional DACS System Preliminary Engineering
\$ 32,315.00	Admin	Cryptosporidium Removal Challenge Test
\$ 840,590.00	03/22/01	Construction Phase Services and Operation of Membrane Demonstration Project and DACS Improvements
\$9,000,000.00	07/18/02	Design Phase services for the Plant Expansion to 160 MGD
\$8,798,792.00	10/23/03	Construction Phase Services
\$3,319,995.00	06/08/06	Proposed Chlorine Investigative Report and Additional Construction Phase Services
\$ 24,099,172.00		Total Contract Authorization

CONTRACT HISTORY

Amount	DATE	DESCRIPTION
\$2,022,282.00	08/28/00	Original Professional Services Agreement for Preliminary Engineering Report
\$ 85,198.00	01/19/01	SA#1- DACS System Improvements
\$ 32,315.00	02/26/01	SA#2 - Cryptosporidium removal testing
\$ 840,590.00	03/22/01	SA#3 - Construction Phase Services & Operations of Membrane Demonstration Plant
\$8,644,325.00	08/09/02	SA#4 - Design and Bidding Phase Services
\$ 69,083.79	03/07/03	SA#5 - Additional Design Services
\$8,798,792.00	02/04/04	SA#6 Construction Phase Services
\$ 286,591.00	05/17/04	SA# 7 Additional Design Phase Services
\$3,319,995.00	Proposed	SA#8 Additional Construction Phase Services
\$ 24,099,171.79		Total Contract Expenditures

Participation goals stated in the original approved compliance plan for the agreement were 2.0% African American (MB); 11.0 % Hispanic (MH); 1.7 % Native American/ Asian American (MA); and 30.0 % WBE. Participation for this amendment:

NON M/WBE TOTAL - PRIME	\$1,108,699	46.77%
Camp Dresser & McKee, Inc. Austin, TX	\$1,108,699	46.77%
MBE TOTAL - SUBCONSULTANTS	\$403,441	17.02%
African American Subtotal	\$180,646	7.62%
All Point Inspection Services, Austin, TX (civil/site inspection)	\$113,105	4.77 %
ELLHOUSE, Austin, TX (structural, building mechanical inspection)	\$ 49,920	2.11 %
Group Solutions RJW, Austin, TX (public information)	\$ 17,621	0.74%

Hispanic Subtotal	\$142,795	6.02%
Azcarate – Fisher Consulting, Dallas, TX (HVAC)	\$50,500	2.13%
CasaBella Architects, Austin, TX (architectural)	\$43,460	1.83%
Jose I. Guerra, Inc., Austin, TX (structural engineering)	\$48,835	2.06%
Asian American Subtotal	\$80,000	3.37%
Gupta & Associates, Inc., Dallas, TX (civil engineering, general inspections)	\$80,000	3.37 %
WBE TOTAL – SUBCONTRACTORS	\$702,607	29.64%
Axiom Engineers, Austin, TX (civil engineering)	\$25,500	1.08%
Clinger Business Services, Austin, TX (administration)	\$100,560	4.24%
Compugraphics, Wimberley, TX (drafting)	\$22,188	0.94%
Harutunian Engineering Corporation, Austin, TX (electrical and instrumentation engineering)	\$162,449	6.85%
Susan Kane Booth Consulting Engineer, Austin, TX (startup and O&M)	\$185,585	7.83%
Wandering Star Industrial Controls, Austin, TX (application software)	\$206,325	8.70%
NON M/WBE TOTAL – SUBCONTRACTORS	\$155,783	6.57%
Bryan Construction Co., Bryan, TX (construction consultants)	\$15,000	0.63%
Machine Dynamics, Albuquerque, NM (vibration engineering)	\$6,491	0.27%
Specialized Response Solutions, Fort Worth, TX (bulk chlorine system training)	\$108,782	4.59%
Structural Integrity Associates, Inc. Austin, TX (industrial metallurgist)	\$25,510	1.08%

Overall participation for the entire project, including this amendment:

PRIME:

44.03% Non M/WBE.

SUBCONSULTANTS:

6.00% MB; 10.48% MH; 2.13% MA; 32.38% WBE; and 4.98% Non M/WBE.

TOTAL:

6.00% MB; 10.48% MH; 2.13% MA; 32.38% WBE; and 49.01% Non M/WBE.